

ANNUAL REPORT OF THE MANAGERS

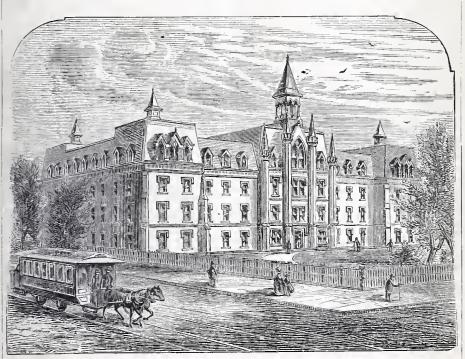
OF THE

NEW YORK INSTITUTION FOR THE BLIND

TO THE

LEGISLATURE OF THE STATE,

FOR THE YEAR 1871.



LUX ORITUR.

"And I will bring the blind by a way that they knew not; I will lead them in paths that they have not known; I will make darkness light before them."—ISAIAH XIII, 16.

NEW YORK:

Bradstreet Press, 279 Broadway. 1871.





FORM OF A BEQUEST

TO THE

NEW YORK INSTITUTION FOR THE BLIND.

I bequeath to my executors the sum of dollars, in trust, to pay over the same to the person who, when the same shall be payable, shall act as Treasurer to the New York Institution for the Blind, to be applied to the charitable uses and purposes of the said Institution, and under its direction.

THIRTY-SIXTH

A. NUAL REPORT OF THE MANAGERS

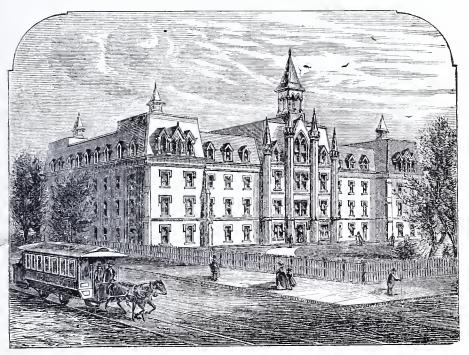
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Board of Managers.

AUGUSTUS SCHELL.

ROBERT S. HONE.

DANIEL H. TOMPKINS.

D. LYDIG SUYDAM.

NATHANIEL P. HOSACK.

JOSEPH GRAFTON.

THEODORE BAILEY MYERS. •

JOHN TREAT IRVING.

JAMES M. McLEAN.

ALEXANDER VAN RENSSELAER.

SMITH CLIFT.

WILLIAM WHITEWRIGHT, JR.

WILLIAM C. SCHERMERHORN.

CHARLES DE RHAM.

FRANCIS A. STOUT.

WILLIAM B. HOFFMAN.

JAMES W. GERARD, JR.

F. A. SCHERMERHORN.

PETER MARIÉ.

J. H. RHOADES.

Officers of the Board.

AUGUSTUS SCHELL	$\dots . President.$
ROBERT S. HONE	Vice-President.
T. BAILEY MYERS	Recording Secretary.
WM. C. SCHERMERHORN	Corresponding Secretary.
JOSEPH GRAFTON	\dots Treasurer.

Standing Committees

FOR

1872.

Committee on Finance.

Daniel H. Tompkins, James M. McLean, William Whitewright, Jr.

Committee on Supplies, Repairs, and Improvements.

SMITH CLIFT,

CHARLES DE RHAM,

NATHANIEL P. HOSACK,

ALEXANDER VAN RENSSELAER,

J. H. Rhoades.

Committee on Instruction and Music.

WILLIAM C. SCHERMERHORN, JOHN T. IRVING, WILLIAM B. HOFFMAN, JAMES W. GERARD, JR.

Committee on Manufactures.

D. LYDIG SUYDAM,

PETER MARIÉ,

WILLIAM B. HOFFMAN,

F. A. Schermerhorn.

The President shall be ex-officio member of all Standing Committees.

The Vice-President and Treasurer shall be ex-officio members of the Committee on Finance. (By-Laws.)

Officers of the Institution.

WILLIAM B. WAIT......Superintendent.

JAMES W. G. CLEMENTS, M. D....Attending Physician.

EDWARD L. BEADLE, M. D.....Consulting Physician.

Consulting Surgeons.

JOHN H. HINTON, M.D., ABRAHAM DUBOIS, M.D.

Teachers in the Academical Department.

STEPHEN BABCOCK,
B. N. LEHMAN,
MISS M. M. HUTCHINS,
MISS ELIZABETH CARPENTER,

MISS ALICE E. SMITH,
MISS C. C. PLIMPTON,
MISS EMMA L. REYNOLDS,
MISS ANN COX.

Teachers in the Musical Department.

Theodore Thomas, Director.

Teachers in the Industrial Department.

Hugh F. Darragh..... Foreman in the Mat and Broom Shop.
Warren Waterbury...... Foreman in the Mattress Shop.
Miss Anna Sheridan...... Upholstress.

Sewing Department.

(Under the direction of Assistant Matron.)
MISS H. STEVENS, Teacher.

House Department.

John Allyn, Steward.*

Matron.

Assistant Matron.

MRS. MARY A. HAYES.

Miss. L. A. Haskell.

Hospital Nurse.

Miss E. M. Clealan and an Assistant.

Boys' Nurse.

Girls' Nurse.

MISS ELIZA MAHONY.

MISS H. STEVENS.

^{*} Mr. Allyn is also Agent of the Manufacturing Department.

REPORT.

To the Honorable the Legislature of the State of New York:

The managers of the New York Institution for the Blind, in compliance with the act of the Legislature, passed April 1st, 1838, respectfully submit to your Honorable Body the following report of their proceedings, and of the disposition made by them of the money received by the Institution from the State.

The various details of the affairs of the Institution and its progress in affording the facilities of education to its pupils, their sanitary condition, and the condition of its financial affairs, may be seen from the reports of the Superintendent, the Physician, and of the Treasurer of the Institution appended hereto, all of which are highly gratifying to the management.

The ordinary expenses of the Institution have been kept within the amount appropriated by the State, together with such additional aid as has been received by donations and legacies, and it is not therefore necessary to apply to your Honorable Body for means to cover any deficiency, or for anything beyond the ordinary appropriation for the expenses of the pupils appointed by the public authorities for the current year.

For this purpose an appropriation of three hundred dollars for each pupil is requisite, being the same amount heretofore allowed, and an item for which purpose we respectfully request may be inserted in the annual appropriation bill to be considered and passed by you. The managers are happy to state that the new building and improvements referred to in their last Annual Report as contemplated have been completed, and are now in full use. By these additions and changes the comforts and efficiency of the Institution have been vastly improved, the old buildings being entirely renovated and furnished with the latest improvements in drainage, ventilation, heating, safety of egress, and general convenience.

All this has been done at an expense of about \$110,000, \$100,000 of which (as was stated in the last Annual Report) has been procured by a mortgage on the property of the Institution.

The following schedule shows the current expenditures of the Institution from January 1st, 1871, to September 30th, 1871, the end of the fiscal year of the Institution, which has been made to correspond with that of the State:

Supplies\$17,273 55
Salaries and Wages
Clothing
Furniture and Fixtures
Repairs and Alterations
Traveling Expenses
Croton Water
Gas
Music
Insuranee
Raw Material Manufacturing
Interest
Petty Aeeounts
Fairs and Exhibitions
\$83,262 97

The following statement exhibits the amount of legacies and donations received prior to October 1st, 1871, from the persons hereinafter named. All of these amounts have been invested in bonds of the Institution secured by the mortgage above referred to.

LEGACIES AND DONATIONS.

Seth Grosvenor	\$10,000	00
Frissell Fund	2,000	00
Wm. E. Saunders	725	84
Thomas Eddy	1,000	00
A. G. Phelps	. 480	50
S. V. Sickles	2,384	90
Robert Goodhue	. 1,000	00
Messrs. Rose	5,000	00
S. V. Albro	. 428	57
John Penfold	. 500	00
Madam Jumel	. 5,000	00
L. Garner	. 1,410	00
Mrs. Steers	. 34	66
John J. Phelps	. 2,350	00
Elizabeth Magee	. 534	00
Benjamin Nathan	. 1,000	00
Sarah Wooley	. 2,844	83
Elizabeth Wooley	. 3,140	00
John Alstyne		00
B. F. Butler	. 150	00

In addition to these, the Board of Managers would acknowledge the receipt of the following legacy and donation which have been temporarily applied to the uses of the Institution.

Rebecca Elting (balance of \$100)	\$6	00
"A Friend" (from Julius A. Lyon)	25	00

The Board of Managers, in laying before you briefly these facts, desire to say that the year has been one of uninterrupted prosperity to the Institution; that they have again been gratified by the efficiency and attention of the various officers and instructors placed in charge of the pupils; that the pupils have made satisfactory progress in all departments; and that by reason of the extensive additions and improvements to the Institution above referred to, the managers feel justified in saying that the New York Institution for the Blind will now,

in all its departments, compare favorably with any benevolent institution in this country.

The New York Institution for the Blind,

AUGUSTUS SCHELL, President.

T. Bailey Myers, Secretary.

City and County of New York, 'ss.:

Augustus Schell of said city, being duly sworn, saith: That he is President of the New York Institution for the Blind; and that the above Report, signed by him, is true, to the best of his knowledge and belief.

AUGUSTUS SCHELL.

Sworn to before me this 29th day of January, 1872,

JAMES H. OGILVIE,

Notary Public City and County of New York.

	\$17,273 55			2,503 72	38.690 75	253 95	423 90	1,31765	1,408 10	1,188 66	71 40	51606	139 00	2,21169	1,57150	\$84.834 47		reasurer.
	By Cash paid for Supplies	Salaries and Wages	Clothing	Furniture and Fixtures	Repairs and Alterations	Traveling Expenses	Gas	Music and Instruction	Raw Material Manufacturing.	Petty Aeeounts	Fairs and Exhibitions	Insuranee	Croton Water	Interest	By Balance on hand, September 30, 1871			JOSEPH GRAFTON, Treasurer.
	aid fo	"	"	"	"	*,	;	:	33	;	7.7	;	"	3	ee on]			
	Cash p	;	33	",	"	"	,,	"	;	3,	;	3	9,9	"	Balan			
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	at of 1870 \$8,749 82	he State of New York 24,510 9	" " New Jersey 6 558 5	" County of New York. 4,080 00	" " Kings 1,490 00	Fuition625 00	ortgage Bonds 18,000 00	Donations 40 51	Legacies17,240 83	265	590	Rents 537 34	Sales of Manufactures. 1.241 1	Interest 591	Fairs and Exhibitions 173 50	Insurance Scrip 139 75	\$84,834 47	
	nt of 1870	from the State of New York 24,510 9	" " New Jersey 6 558 5				:			265	590		Ξ.		:		\$84,834	
y 1st, 1871.	nt of 1870	received from the State of New York 24,510 9	" " " New Jersey 6 558 5			:	:			265	590		Ξ.		Fairs and Exhibitions	Insurance Scrip	\$84,834	
January 1st, 1871.	:	". Cash received from the State of New York 24,510 98	" " " New Jersey 6558 5	" County of New York.		" Tuition	:			" Clothing 265	590		Ξ.		" Fairs and Exhibitions	" Insurance Scrip	\$84,834	

Audited and found to be correct, \\December 11, 1871.

DANIEL H. TOMPKINS, JAMES M. McLEAN, W. WHITEWRIGHT, JR.,

ATTENDING PHYSICIAN'S REPORT.

New York, December 31, 1871.

To the Board of Managers of the New York Institution for the Blind:

Gentlemen:—I would respectfully submit the following as a medical report of the Institution for the year 1871:

The general health of the pupils has been excellent. Two cases of a contagious character have occurred, both the result of exposure while visiting friends. For prudential reasons they were removed to be cared for elsewhere. As far as informed, one terminated fatally. Otherwise the ailments have been of a trifling character, including one case of scarlet fever of a mild type, which was immediately isolated, and the further development arrested. These results show our power and ability to contract and avert consequences through our sanitary regulations, which is further attested by the fact that, during the past three years, there has occurred no death at the Institution.

All of which is respectfully submitted.

J. W. G. CLEMENTS, M. D.

REPORT OF THE SUPERINTENDENT.

To the Board of Managers:

GENTLEMEN:—At the close of the year 1870,

The number of pupils was
Whole number instructed
Number of pupils December 31st, 1871

CAUSES OF BLINDNESS.

The causes of blindness, and the ages at which it occurred in forty-nine of fifty-two cases received, were as follows, three cases having been classified heretofore:

CAUSES OF BLINDNESS.	lind.			_			A	GE	s.						nknown.	
onoces of semenation.	Born Blind	1	2	3	4	5	6	7	8	9	10	13	14	21	Age U	
Congenital	5	12														
Ophthalmia Amaurosis		11	1	1	- <u>-</u>	$\bar{2}$	 1	 1	$-\frac{1}{2}$	3	1	2		1		
Granulated Lids						_~			~		1					
Uataract								1								
Ophthal., sequel to Br. Fever						1	1			1						
" Scarlet Fev. " Small Pox.				$-\frac{1}{2}$		1	1								- -	
" Small Pox " ChickenPox					1							1	1			
" " Measles				$\bar{1}$												
Injuries from Glass in Eye.											1					
Totals of Age	5	12	1	$\frac{1}{4}$	3	4	3	$\frac{-}{2}$	$\frac{}{2}$	$\frac{-}{4}$	$\frac{-}{3}$	3	_ 1	1	1	-

RELATION OF PARENTS.

First Ceusins 2	Distantly related	İ
CASES OF BLINDNES	S AMONG RELATIVES.	
Father1	Grandmother	l
Father and Sister	Grandmother. 1 Uncle 1 Two Sisters. 1	l

STATISTICS OF BLINDNESS.

It is highly important that all the facts which can be obtained with regard to the causes of blindness, and the ages at which it occurs, should be carefully collected and preserved.

To this end, after much labor, I prepared a tabulated statement of causes and ages in all the cases which had been received into the Institution up to and including the year 1866, and which was published in the report for that year. Since that time all new cases have been classified in the yearly reports, the object being to condense them into the general table once every five years. There are twenty-seven institutions for the blind in the United States, and if all will unite in this work, a very valuable statement can be prepared for the next, and for each succeeding United States census.

Such an inquiry into the causes of this infirmity would doubtless enable us to determine the laws which control its occurrence, and to disseminate such information as will tend to diminish the frequency of blindness, especially among infants and young children.

The following tables show the causes of blindness and the ages at which it occurred, in the cases of 969 pupils received into the Institution to December 31st, 1870.

There is quite a large number of cases in which the cause is unknown, for the reason that in former years it was not the uniform practice to record these facts. These unknown cases have been classified according to the proportion found to exist in the known cases.

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AGES.	= 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		
	CAUSES OF BLINDNESS.		Injuries from Blow of Machine Belting

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Blow on the Eye with Blow on the Eye with Blow on the Eye with Blow of an Arrow. Blow of an Arrow. Blow of a Stone Blow of a Hammer. Fall. Kick of a Horse Looking at the Sun Penknie Wound Pitchfork Wound Pitchfork Wound Sting of Insect Sting of Insect Sting of Insect Sting of Lase Sting of Hore Eye Singeing Broadcloth Shive in the Eye Shive in the Eye Shive in the Eye Chip of Hot Iron Excessive Labor Excessive Labor			
Shipson Shipso	ve)	. :	
Blow on the Eye was Blow on the Eye was Blow on the Eye was Blow of an Arrow Blow of a Stone. Blow of a Stone. Blow of a Stone. Blow of a Horse. Kick of a Horse. Kick of a Horse. Looking at the Sh. Pichfork Wound Run Over Sting of Insect Whip Lash Verdigris Chip of Hot Iron. Excessive Labor. Excessive Labor. Exp. to glare & he	eye e e	:	
the the character of th	:e .		
Blow on the Blow on the Blow on the Blow on the Blow of an Blow of an Blow of a Penknite of a Penknite of Pritchfork Run Over. Sting of Ir Sand in the Sand in the Shing of Ir Shipper in the S	. ē. ē.		
Blow oo Blow o	ear ve	:	1
Blow on the Eye with Blow on the Eye with Blow on the Eye with Blow of an Arrow Blow of a Stone Blow of a Stone Blow of a Stone Blow of a Hammer. Fall. Gunshot Prick of a Horse Looking at the Sun. Penknife Wound Pitchfork Wound Sting of Insect Sting of Insect Sand in the Eye Sliver in the Eye	oth.		
	4tl 4tl	:	
Blow on the Eye we Blow of a Blow of a Stone Blow of a Stone Blow of a Stone Blow of a Hamm we Fall Gunshot Kick of a Horse Sting of Insect Sting of Insect Sand in the Eye Singeing Broadcle Singeing Broadcle Whip Lash Whip Lash Chip of Hot Iron Excessive Labor Kabino Exp. to glare & he Malpractice Exp. to glare & he Malpractice	Vaccination	Unknown	
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2	>& 20	ñ	

* In these cases blindness seems to have been entailed through marked mental impressions. In one case produced by the repulsive appearance of one employed in the family who had sore eyes, and in the other by looking at the skinned head of a calf with the eyes in. In both cases the eyes of the children were like those of the objects of distlike.

TABLE
SHOWING CASES OF BLINDNESS IN FAMILIES.

Family.	Grand Parents.	Grand Mother.	Father.	Mother.	Brother.	Sister.	Uncle.	Aunt.	Cousin.	Nephew.	Niece.	RELATION OF PARENTS.
1 1 1 2 8 1 2 6 2 1 1 2 1		1	1 1	1	1 2 3 2 1 1 3 2 3 3 1 2 2 1 2 1 2 2 1 2 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	1 1 1 2 1 4 1		1 1 1 1	3		1	
1 1 1 1 1 1			1 1		1 1 1 1	5	1	1		1		First cousins.
1 1 1 1 1 1			1		2 2 2	1 1 2 2 2 2			4 1 2			First cousins.
$ \begin{array}{c} 1\\1\\1\\45 \end{array} $	1	1	1	2	$\frac{1}{2}$ $\frac{1}{32}$	1 1 31	 1	<u>-</u>	12	1	1	First cousins. First cousins.

DEPARTMENTS.

The several departments of instruction have been carried on as usual during the past year. The pupils generally have manifested a laudable desire to excel, and their progress has been satisfactory. The advancement of the female pupils in the production of various articles of handiwork has been very gratifying. The variety of articles made is much greater than heretofore, and shows a marked increase of the more useful kinds of fancy work. The experiment of giving in-

struction in the use of the sewing machine has resulted successfully.

The mechanism and adjustment of the various machines is readily learned. The "threading up" process is more difficult to the blind than any other connected with the operation of the sewing machine; but, with patient application, all who can thread an ordinary needle can learn to thread up any machine. We now regard this as an essential part of our educational system, and recommend that it be introduced into every institution for the blind in this country.

In the literary department, although we have a large number of new scholars who are all in the slower grades, the standard of scholarship has been very creditable, and indicates a careful, painstaking interest on the part of teachers, and studious application by the pupils, whose high privilege and foremost duty it now is to prepare for the business pursuits and social duties of life.

In the musical department good progress has been made. Five new Steinway pianos have been added to the number in use. Two pianos are used by the class in tuning, whose advancement has been favorable. Tuning is a necessary branch in the musical training of the blind, and should receive the attention which its importance demands. Perfect or fine tuning requires a discriminating ear, good judgment, and that delicate muscular sense by which the hand is enabled to produce such results as the ear may demand. All who possess average natural fitness, and have had the necessary antecedent instruction, can by patient practice become good tuners, while the number of fine tuners will be limited to the more apt who pursue the study with tireless and unflagging diligence.

The following is a statement of the work done in the manufacturing department for the nine months ending September 30th, 1871:

94756

factured Stock.....

Cr.52 00\$786 64 321 86634 16THE MANUFACTURING DEPARTMENT IN ACCOUNT WITH THE N. Y. INSTITUTION FOR THE BLIND, By Sales of Mattresses..... Brooms..... Matts.... " Value of Raw Material on hand with manu-" Bills Receivable..... FOR 9 MONTHS ENDING SEPT. 30, 1871. 3.7 \$438 49 93500696 23 1,607 50 " Raw Material bought in 1871..... December 31st, 1870..... To Fixtures.... To Raw Material and Manufactured Stock on hand " Profit on Work..... September 30th, 1871. Dr.

935 00	\$3,677 22	\$696 23	468 76	\$1,164 99
" Fixtures		By Profit on Work	" Balance	it
		\$3,677 29	Wages \$1,164 99	\$1,164 99

To Salaries and

CONVENTION OF EDUCATORS OF THE BLIND.

The first convention was held at this Institution August 16th, 1853. At that time, a committee was appointed to call another convention. After the lapse of eighteen years, the second convention was called at Indianapolis, August 8th, 1871.

The number of institutions in 1853 was sixteen, in 1871, twenty-seven, showing an increase of nearly 100 per cent.

The second convention evinced a more resolute spirit of inquiry than the first.

The range of subjects considered was greater, and its decisions upon all questions were clearly and sharply defined. The most important resolutions adopted are given below. Upon the subject of the "American Printing House and University for the Blind," there was a spirited debate, after which the following preamble and resolutions were unanimously adopted, the vote being taken by ayes and noes:

Whereas, Mr. Dempsey B. Sherrod, in various public circulars and newspapers throughout the country, has given the names of nearly all the American Institutions for the Blind as endorsing his plan of a university and printing house for the blind in the city of Washington, thereby gaining the confidence and co-operation of many respectable persons; and

Whereas, He has made application to Congress for a large appropriation for such object; and

Whereas, The several institutions for the blind in the United States are able and willing to make all necessary provision for the higher education of the blind in the colleges and seminaries of learning for the seeing, already existing in the several States, therefore

Resolved, That this convention, representing the institutions for the education of the blind in the United States, have no confidence in the plans of Mr. Dempsey B. Sherrod, for the establishment of a university and printing house for the blind, in Washington City, and hereby disown all connection and sympathy with the same.

Resolved, That this convention regards the establishment of any college or university for the blind as unnecessary, and even prejudicial to their interests, and the convention strongly recommends that the efforts and contributions of benevolent persons, who desire to benefit the blind, be turned in some direction more likely to promote their welfare.

The following preambles and resolutions relating to "The American Printing House for the Blind" at Louisville, Kentucky, were adopted after an animated discussion; the last resolution being added as an amendment:

Whereas, An institution has been established, and is in successful operation at Louisville, Kentucky, under the name and title of The American Printing House for the Blinds whose object is to furnish books and school apparatus for the blind in the United States, at cost to those who are able to buy, and gratuitously to the indigent blind; and

Whereas, This institution has been incorporated by the State of Kentucky, and endorsed in several other States by acts of incorporation, organization of auxiliary boards of trustees, legislative appropriations, and numerous private contributions; and,

Whereas, The National Association for Printing Literature and Musical Works for the Blind, located at Philadelphia, has united its efforts with those of the said American Printing House for the Blind; and,

Whereas, We have assurance that the trustees of said American Printing House for the Blind are ready to print, in any kind or kinds of type that may be approved by the superintendents and teachers of the blind in the United States, in this Convention, or hereafter; therefore

Resolved, That we do cordially approve of the objects of the American Printing House for the Blind, and we do hereby commend said institution to the patronage of the several institutions for the blind, and the blind themselves, throughout the United States.

Resolved, That while this convention heartily approves the

print, and the objects of the American Printing House for the Blind, and all other existing establishments that have for their object the printing of books, and making of apparatus for the blind, it is also our opinion that the whole matter of patronage rests with the several institutions, and that the publishing of books should be governed by the law of supply and demand.

Mr. S. P. Ruggles, who was formerly connected with the Perkins Institution for the Blind at Boston, having amassed a large fortune, a part of which he is kindly disposed to devote to the welfare of the blind, in whom he has ever felt a deep interest, sent in a communication stating his views and making the following proposition:

"If all the institutions for the blind in the United States will choose a publishing committee—said committee rcpresenting all said institutions—whose duty it shall be to decide what books, maps, etc., shall be printed, the number of copies in each edition, and how to be distributed among the different blind people and institutions, I will get up an improved printing establishment, supplied with all the necessary printing presses, all the type, of various kinds, for books, maps and all other work, together with all the conveniences for electrotyping and stereotyping, and also all the appliances necessary for the manufacture of the school apparatus, and all things needed for the successful operation of the entire mechanical departments of such an establishment; and all at my own expense, without any charge or cost to said committee or institutions; and I will also superintend the same without pay or cost to any one, my sole object being to give the blind the benefit of all the improvements which I have thought out and perfected within the past ten years, and which I believe will be found to be nearly, or quite as much in advance of the present modes of instruction, printing, etc., as the improvements which I made in 1835 were in advance of everything prior to that time.

"You will oblige me by giving me your opinion on this matter, at your earliest convenience, and inform me, if you think my proposition will meet with a welcome response.

"Respectfully yours,

"S. P. RUGGLES."

The following resolutions relating to the proposal of Mr. Ruggles, were unanimously adopted:

Resolved, That we have received with great satisfaction and pleasure the generous offer of S. P. Ruggles, Esq., of Boston, Massachusetts, proposing, conditionally, to devote a portion of his time and capital to the benefit of the blind, by furnishing books and school apparatus for their use.

Resolved, That a committeee, consisting of five superintendents, be appointed by the President, to confer with Mr. Ruggles, and make such arrangements as will in their judgment promote the interests of the blind.

A resolution asserting the inexpediency of attempting to educate blind persons in the same institutions with deaf mutes was referred to a special committee. The resolution, and report of the special committee thereon, is as follows:

Resolved, That it is not expedient to instruct the blind in the same institution with deaf mutes.

The committee to whom the foregoing resolution was referred, would present the following as among the reasons sustaining it:

- 1. Deaf mutes and the blind differ from each other even more widely than either class differs from those having all their senses; these differences, constitutional or incidental, are such that they can not be intimately associated without unpleasant results.
- 2. The modes of instruction peculiar to each class are entirely unlike and incompatible.
- 3. When both classes are instructed together, the mutes, being usually more numerous than the blind, are likely to

engross a still larger porportionate share of the attention of the officers.

4. The experience of institutions for both classes shows, that, while the department for mutes prospers, and its inmates increase with the population, the growth of the blind department is almost invariably retarded.

No subject of greater importance than that of printing books for the blind was presented to the convention; and none received more marked attention. Both "line" and "point" systems had their advocates; but it was wisely determined not to regard these as rival systems, but to discuss them separately and if possible to decide which of the "line" systems and which of the "point" systems is superior in point of tangibility, cheapness, and general utility.

The first resolution offered was as follows:

Resolved, That so far as line printing is concerned, books for the blind ought to be printed in the lower case letter combined with the Roman capital.

After much debate the resolution was referred, and the following returned as a substitute:

Resolved, That in the opinion of this convention it is advisable that the blind in the United States should learn to read books in which capital letters are employed in their proper places, and the books printed in the Boston lower case alphabet.

This also was subjected to severe criticism, and again referred. The following compromise resolution was finally adopted:

Resolved, That this convention recommend to the favor of the American institutions the books printed in the modified Roman lower case type, known as the "Boston letter," and, also, those printed in the combined system of the capital and angular lower case letter.

From the order and form of the foregoing brief statements, may be learned how sharply defined was the issue between the two "line letter" systems of printing, and with what contrariety and tenacity of opinion they were regarded by the members of the convention.

The discussion of the "Point sign" systems of printing and writing was based upon the following:

Resolved, That the New York horizontal point alphabet should be taught in all American institutions for the education of the blind.

For the first time in the history of American institutions this important subject was brought before a deliberative body.

The New York and the French are the only systems of point printing and writing in use; and admitting all that could be claimed for both in a generic sense, the convention made a candid and rigid investigation into the principles involved in the construction of each, the adaptability and practical utility of each in both printing and tangible writing, in order to determine once for all not only the claim, but the fact of superiority. By the aid of a blackboard the characteristics of each system were explained. Comparative examples of both were submitted, and also a number of books written in the New York system, including seven books of Davies' Legendre, one volume of arithmetic, two volumes of a pianoforte instruction book, a book of life insurance tables, and several volumes of grammar and history. Each system was fairly and impartially examined upon its merits, and the result was a universal and undoubting conviction of the superiority of the New York system over the French in point of tangibility, compactness, cheapness, and in the facility with which it may be both written and read.

This conviction was expressed by the adoption of the resolution declaring the New York system to be the uniform and standard system of point writing and printing in all the American institutions for the blind.

Concerning the organization of an institution for the education of the blind, the following was adopted:

Resolved, That for the proper organization of institutions

for the blind, three departments are co-essential, viz: literary, musical and mechanical; and that each department should afford such facilities as will meet the actual circumstances and requirements of the blind in the several schools.

THE BRITISH AND FOREIGN BLIND ASSOCIATION FOR PROMOTING THE EDUCATION AND EMPLOYMENT OF THE BLIND.

This society was formed in England about three years ago. A circular issued by the society without date, stated that "This society has been formed in consequence of the confusion arising from the want of uniformity of the characters used by the blind for the purpose of reading by touch." Since its formation the society has been engaged in an investigation of the various systems of printing, in order to decide "the vexed question of the best tactile alphabet." The conclusions of the Executive Council of the society which has conducted the investigation, are set forth in a report dated March 25th, 1871. This report has come to the notice of but few persons connected with the American institutions, and I quote therefrom, first, in order that the views of this society upon the subject of line alphabets may be more generally known in this country; and secondly, to specify and correct some grave errors in regard to the "Point" systems, which errors are evidently the result of a misapprehension of the principles upon which the New York system is based, and of the methods by which it is used.

The first extract I make expresses the unanimous decision of the Executive Council—consisting of six gentlemen, five of whom are totally, and one partially blind—that all forms of the Roman or "line" letter systems are failures.

It is as follows:

ON THE BEST FORM FOR EMBOSSED PRINTING, WRITING, &c.

"To take the various systems in the order in which they have been enumerated, the council naturally first turn their attention to the Roman letter, as being that by which all the members had been educated. Here the wide difference between the points of view of the blind and seeing, was at once manifest. In spite of the strongest prima facie reasons to the contrary, the unanimous decision was come to that the Roman character, in all its existing forms, is so complicated that it requires long education and great acuteness of touch to read it with ease, and that its universal adoption would be tanta. mount to the total exclusion of the great majority of the blind from the privilege of reading. The council have never yet met with any intelligent blind person, moderately conversant with the subject, who was not of the same opinion. The constancy with which the Roman letter has been advocated by the seeing patrons and managers of institutions shows how opposite is the conclusion arrived at by them, and the incessant modifications of the Roman letter which have been tried, prove how difficult is the problem of rendering the Roman character legible by touch. The experience of the new world is the same as that of the old. The small angularised Roman letter of Dr. Howe, of Boston, which is used in most of the United States asylums, is probably as good a form as any, and if printed in a larger size would not be difficult to feel. In its present size, however, it is far too small, and has signally failed in America. We have valuable statistics on this point. The American asylums are all State institutions, and have to furnish accounts to their respective State legislatures of the work done by them.

"Out of 664 pupils in seven asylums where the Roman character of Dr. Howe is used, one-third learn to read fluently, one-third by a process of spelling, and one-third fail altogether."

It will be observed that the report is quite in error as to the

foundation and character of our American institutions. But passing over this, I wish to call attention to the statistics which are cited.

The report intimates that the valuable statistics made use of by the council were obtained as follows: that all of the American institutions, by requirement, furnished statistics upon the subject of alphabets, to the legislatures of the States in which they are severally located, and that such statistics from seven of them were compiled by the council, or some member of it, to be used and published as a part of the evidence upon which the council based their decision against "line" signs.

In point of fact, they were prepared and kindly furnished to the writer, at his request, by Wm. Chapin, Esq., Dr. A. D. Lord, Wm. H. Churchman, Esq., F. D. Morrison, Esq., Thos-H. Little, Esq., and Egbert L. Bangs, Esq. They were tabulated and used in an article on Alphabets and Books for the Blind, in which it was shown that points are more tangible than lines; and which was first published in my annual report for the year 1866. Although the Council had much other valuable evidence of the general inutility of all the "line" sign systems; still, these are the only statistics upon the subject contained in their report; and it is but just to the gentlemen above named that this statement as to their origin should be made. If the verdict of the council against "line" systems is in error, I leave it for some more enthusiastic promoter of these systems than myself to point out and refute the error, and proceed to notice the decision of the council upon the subject of point signs, contained in the following extract:

"The great advantage of a dotted system is the extreme facility with which it is written, while it is at the same time easily read; and a special recommendation of Braille's method is, that out of the ordinary alphabet there naturally springs the best form of musical notation in use among the blind. These reasons have induced me, in conjunction with the Coun-

cil of the British and Foreign Blind Association, to study with great care the different forms of dotted character that have been suggested, and especially to compare the ordinary Braille character with the modification of it mentioned above as having been introduced into the New York Institution.

"On first examination this system appeared to some of the members of the Council to be superior to the Braille method, and they constructed frames for writing it. The main advantage claimed for it by its inventor is a considerable gain in compactness. He asserts that the same matter, when written by his method, only occupies two-thirds of the space that it would if written in Braille; and the arguments which he advances in support of this view seem at first sight to be quite satisfactory. But if the experiment is made by having two guides to the same frame, one for writing the New York letters, the other for Braille, thereby securing absolute identity of scale, and if, in such a frame, a few pages of the same book are copied out in both systems, it will be found that the gain in space of the New York plan is quite insignificant, being from one-twelfth to one-twenty-first, instead of a gain of one-third as claimed for it by its advocates. I have no means of judging whether the widely different result arrived at by the promoters of the New York system was owing to their not allowing for the increased distance between the letters, apparently inseparable from this modification of the Braille character, or whether it arose from the difference in scale, the New York dots being one-sixteenth of an inch apart, while the Braille dots, as used in France and most other countries, are one-tenth of an inch apart. Such diminution of scale will, of course, effect a great saving of space, but at the expense of legibility. The reasons which have induced the Council to set aside the New York modification and to adhere to the orginal Braille are briefly these: 1st. The Braille type is very generally diffused, and has made its way through its own intrinsic merits without being pushed by large subscriptions; and before abandoning a character which is more generally used than any other, something more is required than the gain of a one-twelfth to one-twenty-first in space. 2d. The New York modification is poorer in signs than the Braille original, in the proportion of 39 to 63, so that the Braille character is far superior in its adaptibility to short-hand contraction and to music. 3rd. It is most desirable that the musical notation used by the blind shall be universal and thoroughly good. Both these objects are obtained by the Braille character and by no other known method. 4th. It is also most desirable that the short-hand used by the blind shall spring naturally out of the full written system. This, again, is to be obtained in the Braille better than in any other known system."

In this statement everything is asserted but nothing is proved. It is true that the council and Dr. T. R. Armitage, the writer of the report, claim that they have compared the New York with the Braille system by an experiment in which "absolute identity of scale" was secured, and which resulted in favor of New York, but by only from five to eight per cent. It will be observed that no description of the guides and frames used, and no details of the experiment are given, and the writer of the report, who could not possibly proceed without error unless upon full and accurate data with regard to the New York system, admits that he had no means of judging or knowing how the promoters of the New York system could have arrived at their results, except by the very improbable methods which he suggests, and upon which no part of our claim is based. The fact is that the New York guide can be and is used upon the original grooved tablets used for the Braille. Full information with regard to the guide used in writing the New York system was absolutely essential to any comparison of the two systems, and could have been had for the asking; yet the council proceeded without this knowledge, in an imperfect experiment, which inevitably led them to unwarranted conclusions, which are adopted and expressed with dogmatical certainty.

Let us scrutinize the methods used and the conclusions

arrived at by the council. And first, we observe, there is no "identity of scale" between the two systems. A scale is an order of progression, a regular graduation, a graduated series. Now the Braille characters are made by the use of a guide perforated with oblong holes or cells, the horizontal diameter of which is to the vertical diameter as two is to three. Whether two tenths to three tenths of an inch, or two inches to three inches, it matters nothing. The number of points which can be made in a cell horizontally is two, and vertically, three; thus ""

Each cell is devoted to a single letter or sign, and hence the *space* required by one character is the same as that taken by every other character, whether composed of one point or six. And this is equally true of the space taken up by type used in printing. The signs differ in the number of points composing them, but are the same as to space, and the true measure of the signs is the space they occupy.

Hence we see that in the matter of space the signs of the Braile system are not constructed upon any order of progression or gradation, and that they do not constitute a graduated series. In other words, they have dimensions, but no scale.

The New York guide is perforated with cells which contain but two points vertically, and the bars separating the cells are so made that the space taken up *horizontally* by the signs is graduated by the number of points in length which they contain, which may be one or more; thus

The general principle which forms the basis upon which our alphabet is constructed, is, that those letters which occur most frequently should be represented by the shorter and more simple signs, and those which occur but seldom, by the longer and more complex signs.

The particular order of progression or graduation is the proportion used by printers in making up a font of type.

The following table shows the order of frequency and the relative number of times which each letter occurs, and the

number of points in length; or, in other words, the space which each letter requires in the New York system:

Letters.	Times which each occurs.	No. of Points in length.	Total No. of points in length.
ETIAONSHRDLCFUMGPWYBVKJQXZ	60 45 40 40 40 40 40 30 30 20 20 21 12 12 12 12 10 10 10 7 7 7 3 3 3 3 3 1	1 1 1 2 2 2 2 3 2 2 2 3 3 3 3 2 3 5 3 3 3 3 3	60 45 40 80 80 80 80 90 60 40 40 36 36 36 24 30 30 30 21 21 9 9
	520		1,028

Thus it appears that the number of points in length which 520 letters will require in the New York system is 1,028, and the average length of each letter is 1.97 of two points.

Hence we see that the New York system has an order of progression, and is a graduated series of signs, all of which occupy the same space vertically, but vary in horizontal space, according as the signs are one, two, three or more points in length.

From the foregoing it is evident that the New York and Braille systems differ widely in construction and application; that one is not a modification of the other; that one can neither be printed nor written with the type or guide used for the other; that they are not convertible into each other, and have no "absolute identity of scale."

To make a proper comparison, we must apply each system in its own proper mode, with apparatus adapted to each, and compare the results.

With regard to the application of points for printing and writing, a difference of opinion may fairly exist as to the proper size of the points, the distance, horizontal and vertical, between the points, the space between the letters and words, and the space between the lines. These matters may be affected by the nature of the systems proposed, and our experience shows that in all these respects the New York system effects the greatest economy possible in any system. But for the purposes of this demonstration we will adopt points of any size, any distance between the points, any distance between the letters and words, and any space between the lines which the advocates of the Braille may choose to use.

These things being the same in both systems, what space will be required by each in writing or printing a given amount of composition? Taking the printers' font of type as the standard, we have 520 letters to be written. In practice it is necessary to use the Braille cell in its vertical position. But, as each Braille letter requires a whole cell, the result will not be affected if we change the position of the cell, so that the horizontal diameter shall be the longest, which will simplify and facilitate the comparison. Now, as every Braille sign requires the space of three points in length, 520 signs will require space for 520 times 3 points, which equal 1,560 points.

From the foregoing table it appears that to write or print the same 520 letters in the New York system will require space for 1,028 points in length. Hence the space required by the New York system is to the space required by the Braille as 1,028 is to 1,560.

Assuming 100 to be the standard for New York, we have 1028:1560::100:x, from which 1028:1560::100:151,75. In other words, by using the alphabet only, it appears that to write a given composition the Braille requires 51.75, say 52 per cent. more space than the New York system. But it has been found that by using the ten-word and part-word signs of the New York system, viz: ch, ou, sh, th, wh, the, and, of, that, ing, the number of points in length is reduced 10 per cent., or 102 points. 1028 less 102 equals 926. We then have, 926:1560::100:x from which x=168,47.

Hence for a given composition the Braille requires 68.47 per cent. more space than the complete New York system.

Again, from the table we find the average length of the letters of the New York system to be 1.97 of the space required for two points, while the average of the Braille is three points. Hence, 1.97:3::100:x, from which 1.97:3::100::152, showing that the average space required by the Braille letters is 52 per cent. greater than the space required by the New York system. The gain made by the word and part-word signs will raise this to 68.47 per cent., as before stated.

In a comparison made by writing in both New York and Braille only a single page of the "Old Curiosity Shop," the Braille occupied 56 per cent. more space than the New York. In an extended comparison it will be found that the difference is from 60 to 70 per cent., the percentage depending on the style and character of the composition.

With regard to the four reasons which induced the council to adhere to the French system, we remark: 1st. That so much of the first as relates to the gain in space, has been fully answered. As to how generally the French type has been diffused, at least in the United Kingdom, we have no better authority than the report of the council, which says: "Previous to the labors of the association there was not a single institution in the United Kingdom in which it was taught, and in most it had never even been heard of. Such a state-

ment may appear incredible, but it is strictly true." The council was organized about three years ago.

In the United States it is well known that, excepting in the New York city and Missouri institutions, the use of the Braille has been merely nominal, many of the institutions never having used it at all.

2nd. As to the statement that the New York system is poorer in signs than the Braille in the proportion of 39 to 63, we remark, that while 63 is the utmost number of signs which the Braille possesses, 39 is by no means the limit in the New York system, but only the number of which use has thus far been made, and it is not clear that any greater number will be needed for any purpose.

It is the peculiar merit of our system, however, that it produces signs four or more points in length as easily as those one, two, or three, in length.

Thus the number of signs

One poi	int in	lengt	th is		-		-	•		-	3
Two po	ints	"	"	-		-	-		•		- 9
Three '	4	"	"		•	•		•		•	27
Four	"	"	"	•		-	-		-		81
To	tal not	t exc	eedin	g	fou	ır pe	oints	; -			120

Hence the productiveness of the New York system is to that of the Braille as 120 to 63.

3rd. As to the use of the systems for the purpose of musical notation, all that is possible with the Braille is possible with the New York, and much more. Many expressions used in music are omitted from the Braille for the reason that it has no signs by which to represent them, while the New York system has ample resources for all purposes.

Moreover, a number of expressions in the French musical notation are represented by two, three, and four separate signs (in the latter case being equal to eight, points in length), and which the pupil must construe as a single character. Instead of this, the New York system offers an ample variety of con-

tinuous signs, the utmost length of which will not exceed four points.

4th. As to "short-hand" printing or writing, it need only be said that that system offers the greatest facilities which is richest in signs and most economical in practice. Which system has the advantage in these respects has been clearly demonstrated.

At this point I would call attention to the fact, that the tangible power of the New York system is greater than that of the Braille.

It seems at first sight, that as both systems are composed of "point" signs they will be equally tangible.

That such is not the case will appear from the following considerations:

1st. The vertical diameter of the signs should fall within the proper limits of tactile perception, when the finger is at rest.

2d. The characters should be continuous, and, as far as possible, be in the same horizontal line, so that the finger of the reader need not move in any other direction as it is drawn across the page.

3d. The signs most often used should be the shortest and simplest. In accordance with this principle we find that in the New York system, as applied to printing and writing, 28 per cent. of all the signs are but one point in length, 47 per cent. are two points in length, while but 25 per cent. are three points in length.

In other words, 75 per cent. of all the signs are made by the use of not more than four points, and within the compass of two points in length. To sum up: The New York system, with its Capital and small letters (the former being derived from the latter by a simple process), its numerals and marks of punctuation, is perfectly adapted to all the purposes of both writing by and printing for the blind. It greatly excels any other known system in the variety and tangibility of its characters, which can be applied to any language, and used

to express the technical signs and symbols of any science or art. It is simple in form, ample in resources, universal in application, and, more than all, can be easily learned and read by any blind person of ordinary intelligence.

I commend the subject to the careful consideration of all who are interested in the education of the blind, particularly where no common system of tangible writing and printing has yet been introduced.

It is one of paramount importance, and, when fully understood, the New York system will doubtless be approved and adopted, as combining in the best possible manner all the principles which can be applied in the construction and use of any system of point writing and printing.

In closing, I am able to state that the successful application of the New York system to the writing and printing of music is fully assured, and that I hope to present in my next Annual Report, and perhaps to the Convention of Educators of the Blind, which is to be held during the coming summer, a system of musical notation at once natural, simple, and methodical, and which any person who is able to use the New York system can easily understand and apply.

Annexed is a full synopsis of the New York system.

Respectfully submitted,

WM. B. WAIT,

Superintendent.

THE NEW YORK SYSTEM OF POINT WRITING AND PRINTING FOR THE USE OF THE BLIND.

THE ALPHABET.

CA	PΙ	TA	\mathbf{L}^{-1}	LE	TT	E	RS.

A	В	\mathbf{C}	D	\mathbf{E}	\mathbf{F}
• •		• • •	0 0 0 0	• • • •	000
G	\mathbf{H}	1	J	K	L
00	000	0000	0 0 0	0000	0 0 0
\mathbf{M}	N	Ο	P	Q	${f R}$
0 0 0	0 0	0 00	• •	0 0 0	000
8	${f T}$	\mathbf{U}	V	W	X
0 0 0	000		0 0		0 0 0
		Y	. Z		
		0 0	000		

SMALL LETTERS.

а	b	С	d	е	f	g	h
• •		• •	0 0	٥	000	000	000
i	j	k	1	m	\mathbf{n}_{\perp}	0	p
0	000	000	•	0 0		0	• `
٥	•	٥	• 0	٥	•	0	0 9
q	\mathbf{r}	8	t	u	V	W	x
•	•	•			0 9	۰	
• • •	0 0	•	٥	000	•	• •	000
			У	${f z}$			
			•	0 0 0	•		
			0 0	0 0			

It will be observed that the capital letters are derived from the small letters, by suffixing to each of them as many points as will form a new character four points in length, in the following manner:

1st. When the small letter ends with a point in the upper row, as in the letter "a," add the suffix in the lower row.

2d. When the small letter ends with a point in the lower row, as in "e," or in both upper and lower rows, as in "d," add the suffix in the upper row.

WORD AND PART WORD SIGNS.

the	and	of	that	ing	ch	ou
90	0 0	0 0	0 0	00	0 0	
			th			
		0 0 0	0 0	0 0		

NUMERALS.

1	2	8	4	5	6	7	8	8	10
00	0 0	٥	0 0	00	0	0	0	•	•
0 0		0 0	0	0	0 0	0		0	

Prefix, indicating that the characters which follow are numerals, ***

PUNCTUATION MARKS.

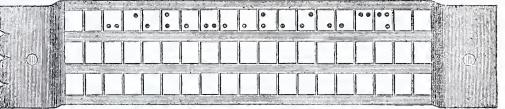
Period, """, or a blank space equal to five points in length.

Comma, °, preceded and followed by a blank space equal to two points.

Semi-colon, o, preceded and followed by a blank space equal to two points.

Colon°	000	Exclamation	0000
Apostrophe :	000	Asterisk	
Hyphen :	000	Quotation	
Interrogation°	0 0 0	Dash	9 9 6
Parenthesis ;	000		

n	0	i	t	u	t	i	t	8	n	I	
		Го	1			0	77	161		1001001	1



The above cut represents a section of the New York "Guide," with the word Institution as it appears when written. When the paper is turned over, for reading, it appears thus:

I	n	8	t	i	\mathbf{t}	u	t	i	0	n
0000	9 0	0		0	٥			0		0.6

The following abbreviations will be found useful in mathe-They are much more natural and simple than any arrangement of signs would be.

For	plus	write	p.
"	minus or subtract	"	8.
66	multiply by	66	m.
66	divided by	"	d.
66	plus or minus	"	p or s.
66	the radical sign	"	rad.
66	equality	"	eq.
66	greater than	"	gr t.
"	less than	"	Ĭ t.
"	angle	"	al.
46	triangle	66	tr al.
66	rectangle	"	rec, or rec al.
66	square	"	sq.
66	circle	"	ci.
66	circumference	"	cir.
66	parallel	"	pl.
"	perpendicular	66	pr.
"	plane	66	pe.
66	ratio of circumfer	ence t	o diameter write

e ;—pi.

cube root write; -rad (followed by the number indicating the root) before the quantity whose root is to be taken.

To indicate the power to which a quantity is to be raised, write after the quantity;—pr, followed by the number indicating the power.

For tangent write; -tan.

- " co-tangent " co tan.
- " secant " se.
- " co-secant " co se.

The writing is done upon a tablet, which is grooved to receive the points.

These are made by a "style" which is constructed of a piece of small wire, properly rounded at one end, and inserted in a suitable handle. In writing observe the following rules:

1st. Write from *left* to *right*. For convenience the points in the upper row are known as 1, 3, 5, 7; and in the lower row 2, 4, 6, 8. This order will be the same for both writing and reading.

- 2d. Between all letters leave a blank space equal to one point.
- 3d. Between all words leave a blank space equal to two points. At the end of a phrase, clause, or sentence, the proper punctuation mark may be used, or a blank space left equal to three or four points in length.

In practice the capital letters and punctuation marks are not absolutely essential, and need not be used.

Pupils will find great benefit in carefully writing out their lessons in every branch of study. These manuscripts should be preserved and bound. To insure preservation; each page may be coated on the back or perforated side, with a solution of bleached shellac and alcohol. Books made in this manner will endure constant using for years.

Page 42, line thirteen from top, should read "Write from right to left."

To indicate the power to which a quantity is to be raised, write after the quantity;—pr, followed by the number indicating the power.

For tangent write;—tan.

- " co-tangent " co tan.
- " secant " se.
- " co-secant " co se.

The writing is done upon a tablet, which is grooved to receive the points.

"style" which is constructed of a

point.

ad. Between all words leave a blank of a phrase, clause, or sentence, the proper punctuation mark may be used, or a blank space left equal to three or four points in length.

In practice the capital letters and punctuation marks are not absolutely essential, and need not be used.

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LIST OF PUPILS.

0000

MALES.

ANDERSON, WILLIAM, ANGEL. CHARLES, ABBOTT, JAMES,

BERGEN, JOHN, BAUR. AUGUST, BYRNE, THOMAS, BOLZ, AUGUSTUS,

CREAMER, CHARLES, CARROLL, JOHN, CARROLL, THOMAS, CAUFIELD, PETER, CARLL, FREDERICK, CORCORAN, JOHN,

DAGNIA. THOMAS, DUGANNE. CORNELIUS, DOHERTY, WILLIAM F., DONAHUE, THOMAS, DILLON, JOHN H., DALEY, SAMUEL,

EADIE. ARCHIBALD, EDWARDS, GEORGE,

FLEMING. JOHN, FOGGIN, EDWARD,

GAMBLE CHARLES G., GRAHAM, EDGAR, GRAHAM. L. R. GRANT. CHARLES M. GOLDING, JOHN H.,

HAMMOND, GEORGE M., HOPPER REUBEN, HARRING, ISAAC B., HOLLAND, THOMAS,

FEMALES.

ABBOTT, EMMA,

BEAR, HARRIET, BRADLEY, SARAH L., BENNETT, JANE BARRETT, ELIZABETH, BOSCH, CATHERINE, BARRETT, JULIA, BLEFFERT, CAROLINE, BOLLARD, MARGARET,

CUNNINGHAM. M. J., CONROY. MARY. CONDERON, ELIZA, CASSIDY, MARY, COFFEE, MARGARET J., CARLL, IANTHE,

DOLAN, DELIA.
DIAMOND, ELIZABETH,
DRINGELAS, ROSA.
DOWDALL MARY C.
DIXON, EMMA.

EISENSCHMIDT, CLARA, ELLIS, ELIZABETH,

FICHTEL, AMELIA D., FINNEGAN. VIRGINIA, FARRELL, SUSAN.

GREEN, ELIZABETH, GEORGE, HARRIET, GRAUTIGAN, CAROLINE, GRIFFIN, MARY, GASSNER, LETELIA F. GILMARTIN, MARY A.,

HOSIER, ELIZABETH B.,

MALES.

HUNT, JOHN W., HOWLAND, IRVING,

KEISER, CHARLES, KUNTZ, JOHN J., KROTLENTHALER, HERM'N A.

LEIGH GEORGE, LINSSEN, C. C.,

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MUSSEHL, RUDOLPH,
MCNAMEE, JOHN,
MCNAMEE, JOHN,
MORRIS, JOHN,
MARUM, EDWARD,
MYERS, THEODORE,
MULLALY, WALTER J.,
MEYERHAFER AUGUSTUS,
MAXWELL, WILLIAM H.,
MYERS, SAMUEL N.,
MCDONALD, THOMAS,
MITCHELL VALENTINE,
MURRAY, JOHN,
NONES, THEODORE,

OSTERHELD, FREDERICK, OBRIEN, HENRY, OSTER, HENRY,

PORAT, OSCAR M., POWERS, DAVID,

ROACH, JOHN H., RUTH, JOHN, ROGERS, EDWARD A.,

STODDARD, CHARLES, SHOURDS, SAMUEL, SMALL, JOHN, SMITH, EDWARD, SEAMAN, THEODORE D., SPREINE. CHARLES, SCHNEIDERMAN, JOHN. SCHWEIZER, FREDERICK, SCHROEDER, HERMAN,

TIMPSON, EDWARD C., TOB!N. JOHN, TOBIAS, WILLIAM,

UPTON, JESSE,

VANDERPOEL, SAMUEL,

WAGNER, JOHN J. WARREN, FRANCIS,

FEMALES.

HOAR, MARY ANN,
HOSIER, ELIZABETH B.,
HALPIN, MARGARET,
HURLEY, MARY E.,
HAAG, CAROLINE,
HUTCHINSON, H.,
HAMILTON, LORANNA,
HOUGHTON, MARY,
HOWLAND, HANNAH,
HOWLAND, MARY A.,

JUSTIN, LOUISA, JOHNSON, DELIA M., JENKINS, EMILY,

KEOGLE, MATILDA,

LUDLOW, MARGARET, LANSLEY, HARRIET, LIVINGSTON, SARAH, LYNCH, ANN,

MAGATHAN. SARAH J., MCGEE, ELIZABETH, MCINTEE, ANN, MCGARR. MARY J., MAXWELL, BRIDGET, MAXWELL, M. A., MCNAMARA, CECELIA, MARSTON, LOUISA, MURTHA, ANNA,

NEVINS, ANNIE, NORTON, MARY, NUDD, IDA F.,

O'CONNOR, CATHERINE,

PORAT, BERNADINA,

QUEE, MARGARET,

ROBERTS, DOLORES, ROBINSON, L.ZZIE,

SCHALN, ANN.
SULLIVAN, ANNIE,
SAUNK, ELIZABETH,
SAMUEL, FANNY E.,
STAATS, MARY ELLEN,
SMITH, ISABELLA E.,
SCHUMANN, LIZZIE,
SCHRAM, ISABELLA,

TOUHEY, MARY J.,

MALES

WYANT, WILLIAM, WILSON. JOHN, WILLIAMS, JOHN H., WILLIAMS. JAMES H., WELSH, THOMAS F., WORTMAN, JESSEK.

YONGE, FRANK B.,

FEMALES.

THOMPSON, MARY I., THOMPSON, LILLIE, THROCKMORTON, IRENA. THUMA, ANNA,

WARD, EMMA. WATSON, MARY A., WALTHER, MARGARET,





